#13

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/759,130B

DATE: 09/26/2002 P.6
TIME: 16:34:01

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\09262002\I759130B.raw

```
 4 <110> APPLICANT: Millennium Pharmaceuticals, Inc.
 5       McCarthy, Sean A
 6       Fraser, Christopher C
 7       Sharp, John D
 8       Barnes, Thomas S
 9       Kirst, Susan J
10       Mackay, Charles R
11       Myers, Paul S
12       Leiby, Kevin R
13       Wrighton, Nicolas
14       Goodearl, Andrew
15       Holtzman, Douglas A
17 <120> TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING
18       PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
19       USES.
21 <130> FILE REFERENCE: MPI00-535OMNIM
23 <140> CURRENT APPLICATION NUMBER: US 09/759,130B
24 <141> CURRENT FILING DATE: 2002-09-16
26 <150> PRIOR APPLICATION NUMBER: US 09/479,249
27 <151> PRIOR FILING DATE: 2000-01-07
29 <150> PRIOR APPLICATION NUMBER: US 09/559,497
30 <151> PRIOR FILING DATE: 2000-04-27
32 <150> PRIOR APPLICATION NUMBER: US 09/578,063
33 <151> PRIOR FILING DATE: 2000-05-24
35 <150> PRIOR APPLICATION NUMBER: US 09/333,159
36 <151> PRIOR FILING DATE: 1999-06-14
38 <150> PRIOR APPLICATION NUMBER: US 09/596,194
39 <151> PRIOR FILING DATE: 2000-07-14
41 <150> PRIOR APPLICATION NUMBER: US 09/342,364
42 <151> PRIOR FILING DATE: 1999-06-29
44 <150> PRIOR APPLICATION NUMBER: US 09/608,452
45 <151> PRIOR FILING DATE: 2000-06-30
47 <150> PRIOR APPLICATION NUMBER: US 09/393,996
48 <151> PRIOR FILING DATE: 1999-09-10
50 <150> PRIOR APPLICATION NUMBER: US 09/602,871
51 <151> PRIOR FILING DATE: 2000-06-23
53 <150> PRIOR APPLICATION NUMBER: US 09/420,707
54 <151> PRIOR FILING DATE: 1999-10-19
56 <160> NUMBER OF SEQ ID NOS: 460
58 <170> SOFTWARE: FastSEQ for Windows Version 4.0
60 <210> SEQ ID NO: 1
61 <211> LENGTH: 5121
62 <212> TYPE: DNA
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C--> 24 <141> CURRENT FILING DATE: 2002-09-16

RAW SEQUENCE LISTING   DATE: 09/26/2002
PATENT APPLICATION: US/09/759,130B   TIME: 16:34:01

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\09262002\I759130B.raw

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 63 <213> ORGANISM: Homo sapiens
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 66 gtttagtctg cagccgagca gctaaaggga gaaagaatcg ctcaggaaag acacactgca 60
 67 gactccaccg gcaccctgca atagatgggt tccgactaca caagggagaa aacgcggagg 120
 68 tgacactctc ctgcctggaa agaggacgaa cgaccaaaca aacgcaagga ctggactcca 180
 69 tgccgaaggt atctggaagt cgtgacacgg tgtgtataaa acaaaagttt gcgagctgtt 240
 70 aattgctgtg ctgtgttatt aagagacgct ttcaagtttc aagtaccaaa tgtagcttta 300
 71 cgttgccaaa ggaagttgag gcaattgctt tgctgtttta acttgctctg tgagggaaat 360
 72 ctcataaact gaccaatgca ccaaatgaat gctaaaatgc actttaggtt tgtttttgca 420
 73 cttctgatag tatctttcaa ccacgatgta ctgggcaaga atttgaaata caggatttat 480
 74 gaggaacaga gggttggatc agtaattgca agactatcag aggatgtggc tgatgtttta 540
 75 ttgaagcttc ctaatccttc tactgttcga tttcgagcca tgcagagggg aaattctcct 600
 76 ctacttgtag taaacgagga taatggggaa atcagcatag gggctacaat tgaccgtgaa 660
 77 caactgtgcc agaaaaactt gaactgttcc atagagtttg atgtgatcac tctacccaca 720
 78 gagcatctgc agcttttcca tattgaagtt gaagtgctgg atattaatga caattctccc 780
 79 cagtttcaa gatctctcat acctattgag atatctgaga gtgcagcagt gggactcgc 840
 80 attcccctgg acagtgcatt tgatccagat gttggggaaa attccctcca cacatactcg 900
 81 ctctctgcca atgattttt taatatcgag gttcggacca ggactgatgg agccaagtat 960
 82 gcagaactca tagtggtcag agagttagat cgggagctga agtcaagcta cgagcttcag 1020
 83 ctcactgcct cagacatggg agtacctcag aggtctggct catccatact aaaaataagc 1080
 84 atttcagact ccaatgacaa cagccctgct tttgagcagc aatcttatat aatacaactc 1140
 85 ttagaaaact ccccggttgg cactttgctc ttagatctga atgccacgga tccagatgag 1200
 86 ggcgctaatg ggaaaattgt atattccttc agcagtcatg tgtctcccaa aattatggag 1260
 87 acttttaaaa ttgattctga aagaggacat ttgactcttt tcaagcaagt ggattatgaa 1320
 88 atcaccaaat cctatgagat tgatgttcag gctcaagatt tgggtccaaa ttcaatccca 1380
 89 gcccattgca aaattataat taaggttgtg gatgttaatg acaataaacc tgaaattaac 1440
 90 atcaacctca tgtcccctgg aaaagaagaa atatcttata tttttgaagg ggatcctatt 1500
 91 gatacatttg ttgctttggt cagagttcag gacaaggatt ctgggctgaa tggagaaata 1560
 92 gtttgtaagc ttcatggaca tggtcacttt aaacttcaga agacatatga aaacaattat 1620
 93 ttaatcttaa ctaatgccac actggataga gaaaagagat ctgagtatag tttgactgta 1680
 94 atcgctgagg acaggggggac acccagtctc tctacagtga aacattttac agttcaaatc 1740
 95 aatgatatca atgacaatcc accccacttc cagagaagcc gatatgaatt tgtaatttca 1800
 96 gaaaataact caccaggggc atatatcacc actgttacag ccacagatcc tgatcttgga 1860
 97 gaaaatgggc aagtgacata caccatcttg gagagtttta ttctaggaag ttccataact 1920
 98 acatatgtaa ccattgaccc atctaatgga gccatctatg ccctcagaat ctttgatcat 1980
 99 gaagaagtga gtcagatcac ttttgtggta gaagcaagag atggaggaag cccgaagcaa 2040
100 ctggtaagca ataccacagt tgtgctcacc atcattgacg aaaatgacaa cgttcctgtg 2100
101 gttatagggc ctgcattgcg taataatacg gcagaaatca ccattcccaa aggggctgaa 2160
102 agtggctttc atgtcacaag aataagggca attgacagag actctggtgt gaatgctgaa 2220
103 ctcagctgcg ccatagtagc aggtaatgag gagaatatct tcataattga tccacgatca 2280
104 tgtgacatcc ataccaacgt tagcatggat tctgttccct acacagaatg ggagctgtca 2340
105 gttatcattc aggacaaagg caatcctcag ctacatacca aagtccttct gaagtgcatg 2400
106 atctttgaat atgcagagtc ggtgacaagt acagcaatga cttcagtaag ccaggcatcc 2460
107 ttggatgtct ccatgataat aattatttcc ttaggagcaa tttgtgcagt gttgctggtt 2520
108 attatggtgc tatttgcaac taggtgtaac cgcgagaaga aagacactag atcctataac 2580
109 tgcagggtgg ccgaatcaac ttaccagcac cacccaaaaa ggccatcccg gcagattcac 2640
110 aaaggggaca tcacattggt gcctaccata aatggcactc tgcccatcag atctcatcac 2700
111 agatcgtctc catcttcatc tcctacctta gaaagagggc agatgggcag ccggcagagt 2760
112 cacaacagtc accagtcact caacagtttg gtgacaatct catcaaacca cgtgccagag 2820
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Input Set : A:\Sequence Listing.txt
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113 aatttctcat tagaactcac ccacgccact cctgctgttg agcaggtctc tcagcttctt 2880
114 tcaatgcttc accaggggca atatcagcca agaccaagtt ttcgaggaaa caaatattcc 2940
115 aggagctaca gatatgccct tcaagacatg gacaaattta gcttgaaaga cagtggccgt 3000
116 ggtgacagtg aggcaggaga cagtgattat gatttggggc gagattctcc aatagatagg 3060
117 ctgctgggtg aaggattcag cgacctgttt ctcacagatg gaagaattcc agcagctatg 3120
118 agactctgca cggaggagtg cagggtcctg ggacactctg accagtgctg gatgccacca 3180
119 ctgccctcac cgtcttctga ttataggagt aacatgttca ttccagggga agaattccca 3240
120 acgcaacccc agcagcagca tccacatcag agtcttgagg atgacgctca gcctgcagat 3300
121 tccggtgaaa agaagaagag tttttccacc tttggaaagg actccccaaa cgatgaggac 3360
122 actggggata ccagcacatc atctctgctc tcggaaatga gcagtgtgtt ccagcgtctc 3420
123 ttaccgcctt ccctggacac ctattctgaa tgcagtgagg tggatcggtc caactccctg 3480
124 gagcgcagga agggacccct gccagccaaa actgtgggtt acccacaggg ggtagcggca 3540
125 tgggcagcca gtacgcattt tcaaaatccc accaccaact gtgggccgcc acttggaact 3600
126 cactccagtg tgcagccttc ttcaaaatgg ctgccagcca tggaggagat ccctgaaaat 3660
127 tatgaggaag atgattttga caatgtgctc aaccacctca atgatgggaa acacgaactc 3720
128 atggatgcca gtgaactggt ggcagagatt aacaaactgc ttcaagatgt ccgccagagc 3780
129 taggagattt tagcgaagca tttttgtttc catgtatatg gaaataggga acaacaacaa 3840
130 caacaaaaaa ccctgaaaga actggcattg ccaaatagtt gcattatca taaatgtgtc 3900
131 tgtgtatatt gaatattaaa tactgtattt tcgtatgtac acaatgcaag tgtgattatt 3960
132 ttaatctgta tttaaaaat acatttgtac cttatattta tgtgtaattt aacaaacaaa 4020
133 ttttattttt ttactcccat gacagacatg ttttccctag tcgtgtagaa actagccact 4080
134 gttcaaatct gatacactat tcaaccacaa agtgtaaagg cactgcttag attagttttg 4140
135 ttggggaaga attattatgt tgtatgaaca accccactga agcattatac aattcttaat 4200
136 tccattaagt gatcccactt tttttcaata acttttttaga aattaagaat cattaaaatt 4260
137 gttaagctat tttattgtta ttttctctac tttctactag ccccaatagt tgaactctta 4320
138 taggaaaatc gaaagataaa gtgaaagttt atttcaggac tgagaaatat cttgaaggtt 4380
139 atttattaga tgactatctc aaatgaactt tttatagaca atgatgaaaa cagaactaaa 4440
140 gtcaatgttt cctgactccc aggcccctac tattccaggc catcacactg gcctgttccg 4500
141 gagaatattt ctctcacaat attattatct acttataatt atggtaaaca ataaattta 4560
142 ttccatcctt gtagtatgaa acatgctcca aggaaatgga atctgtcctt taaatggata 4620
143 acagtatgtg ttctaatggc ataaaatatt actggataaa aacagttgtg tcagtgtctc 4680
144 tcctaaggta gtaaatataa ttgacttatt ctgaacccat tctattttga atctcccctt 4740
145 tcctctcaca atacttgaac attttaatct tttggaatat tgtctttctt tgttataact 4800
146 attcattttt agcttttgtc tccagtgcat gatctcatat ttttgctttt atttttagta 4860
147 taagaacatt tataaaatca tatttttgtt actgcaattg ttttatttgt tgtgtggcaa 4920
148 atgagaaatc ctttatttat tgtgctgtga tctctctgtg tggaatgcct tggtgagaga 4980
149 gatgcttatt atgactatta tcatttctga ccaagcttct attaatgtta tttctaataa 5040
150 tacactatct tgattgtact ctccagaaaa tttttctgtc agtgaaaata aaagaaaaat 5100
151 taaagtaaaa aaaaaaaaa a                                             5121
153 <210> SEQ ID NO: 2
154 <211> LENGTH: 3405
155 <212> TYPE: DNA
156 <213> ORGANISM: Homo sapiens
158 <400> SEQUENCE: 2
159 atgcaccaaa tgaatgctaa aatgcacttt aggtttgttt ttgcacttct gatagtatct 60
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161 ggatcagtaa ttgcaagact atcagaggat gtggctgatg ttttattgaa gcttcctaat 180
162 ccttctactg ttcgatttcg agccatgcag aggggaaatt ctcctctact tgtagtaaac 240
163 gaggataatg gggaaatcag catagggct acaattgacc gtgaacaact gtgccagaaa 300
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RAW SEQUENCE LISTING   DATE: 09/26/2002
PATENT APPLICATION: US/09/759,130B   TIME: 16:34:01

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\09262002\I759130B.raw

```
164 aacttgaact gttccataga gtttgatgtg atcactctac ccacagagca tctgcagctt 360
165 ttccatattg aagttgaagt gctggatatt aatgacaatt ctccccagtt ttcaagatct 420
166 ctcataccta ttgagatatc tgagagtgca gcagttggga ctcgcattcc cctggacagt 480
167 gcatttgatc cagatgttgg ggaaaattcc ctccacacat actcgctctc tgccaatgat 540
168 tttttaata tcgaggttcg gaccaggact gatggagcca agtatgcaga actcatagtg 600
169 gtcagagagt tagatcggga gctgaagtca agctacgagc ttcagctcac tgcctcagac 660
170 atgggagtac ctcagaggtc tggctcatcc atactaaaaa taagcatttc agactccaat 720
171 gacaacagcc ctgcttttga gcagcaatct tatataatac aactcttaga aaactccccg 780
172 gttggcactt tgctcttaga tctgaatgcc acggatccag atgagggcgc taatgggaaa 840
173 attgtatatt ccttcagcag tcatgtgtct cccaaaatta tggagacttt taaaattgat 900
174 tctgaaagag gacatttgac tcttttcaag caagtggatt atgaaatcac caaatcctat 960
175 gagattgatg ttcaggctca agatttgggt ccaaattcaa tcccagccca ttgcaaaatt 1020
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177 cctggaaaag aagaaatatc ttatattttt gaaggggatc ctattgatac atttgttgct 1140
178 ttggtcagag ttcaggacaa ggattctggg ctgaatggag aaatagtttg taagcttcat 1200
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190 gtagcaggta atgaggagaa tatcttcata attgatccac gatcatgtga catccatacc 1920
191 aacgttagca tggattctgt tccctacaca gaatgggagc tgtcagttat cattcaggac 1980
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195 gcaactaggt gtaaccgcga gaagaaagac actagatcct ataactgcag ggtggccgaa 2220
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198 tcatctccta ccttagaaag agggcagatg ggcagccggc agagtcacaa cagtcaccag 2400
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200 ctcacccacg ccactcctgc tgttgagcag gtctctcagc ttctttcaat gcttcaccag 2520
201 gggcaatatc agccaagacc aagttttcga ggaaacaaat attccaggag ctacagatat 2580
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203 ggagacagtg attatgattt ggggcgagat tctccaatag ataggctgct gggtgaagga 2700
204 ttcagcgacc tgtttctcac agatggaaga attccagcag ctatgagact ctgcacggag 2760
205 gagtgcaggg tcctgggaca ctctgaccag tgctggatgc caccactgcc ctcaccgtct 2820
206 tctgattata ggagtaacat gttcattcca ggggaagaat cccaacgca accccagcag 2880
207 cagcatccac atcagagtct tgaggatgac gctcagcctg cagattccgg tgaaaagaag 2940
208 aagagttttt ccacctttgg aaaggactcc ccaaacgatg aggacactgg ggataccagc 3000
209 acatcatctc tgctctcgga aatgagcagt gtgttccagc gtctcttacc gccttccctg 3060
210 gacacctatt ctgaatgcag tgaggtggat cggtccaact ccctggagcg caggaaggga 3120
211 cccttgccag ccaaaactgt gggttaccca cagggggtag cggcatgggc agccagtacg 3180
212 cattttcaaa atcccaccac caactgtggg ccgccacttg gaactcactc cagtgtgcag 3240
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213 ccttcttcaa aatggctgcc agccatggag gagatccctg aaaattatga ggaagatgat 3300
214 tttgacaatg tgctcaacca cctcaatgat gggaaacacg aactcatgga tgccagtgaa 3360
215 ctggtggcag agattaacaa actgcttcaa gatgtccgcc agagc           3405
217 <210> SEQ ID NO: 3
218 <211> LENGTH: 911
219 <212> TYPE: PRT
220 <213> ORGANISM: Homo sapiens
222 <400> SEQUENCE: 3
223 Met His Gln Met Asn Ala Lys Met His Phe Arg Phe Val Phe Ala Leu
224  1               5                  10                  15
225 Leu Ile Val Ser Phe Asn His Asp Val Leu Gly Lys Asn Leu Lys Tyr
226              20                  25                  30
227 Arg Ile Tyr Glu Glu Gln Arg Val Gly Ser Val Ile Ala Arg Leu Ser
228          35                  40                  45
229 Glu Asp Val Ala Asp Val Leu Leu Lys Leu Pro Asn Pro Ser Thr Val
230      50                  55                  60
231 Arg Phe Arg Ala Met Gln Arg Gly Asn Ser Pro Leu Leu Val Val Asn
232 65                  70                  75                  80
233 Glu Asp Asn Gly Glu Ile Ser Ile Gly Ala Thr Ile Asp Arg Glu Gln
234              85                  90                  95
235 Thr Leu Pro Thr Glu His Leu Gln Leu Phe His Ile Glu Val Glu Val
236              100                 105                 110
237 Leu Asp Ile Asn Asp Asn Ser Pro Gln Phe Ser Arg Ser Leu Ile Pro
238          115                 120                 125
239 Ile Glu Ile Ser Glu Ser Ala Ala Val Gly Thr Arg Ile Pro Leu Asp
240      130                 135                 140
241 Ser Ala Phe Asp Pro Asp Val Gly Glu Asn Ser Leu His Thr Tyr Ser
242 145                 150                 155                 160
243 Leu Ser Ala Asn Asp Phe Phe Asn Ile Glu Val Arg Thr Arg Thr Asp
244              165                 170                 175
245 Glu Leu Lys Ser Ser Tyr Glu Leu Gln Leu Thr Ala Ser Asp Met Gly
246              180                 185                 190
247 Val Pro Gln Arg Ser Gly Ser Ser Ile Leu Lys Ile Ser Ile Ser Asp
248          195                 200                 205
249 Ser Asn Asp Asn Ser Pro Ala Phe Glu Gln Gln Ser Tyr Ile Ile Gln
250      210                 215                 220
251 Leu Leu Glu Asn Ser Pro Val Gly Thr Leu Leu Leu Asp Leu Asn Ala
252 225                 230                 235                 240
253 Thr Asp Pro Asp Glu Gly Ala Asn Gly Lys Ile Val Tyr Ser Phe Ser
254              245                 250                 255
255 Ser His Val Ser Pro Lys Ile Met Glu Thr Phe Lys Ile Asp Ser Glu
256              260                 265                 270
257 Lys Ser Tyr Glu Ile Asp Val Gln Ala Gln Asp Leu Gly Pro Asn Ser
258          275                 280                 285
259 Ile Pro Ala His Cys Lys Ile Ile Ile Lys Val Val Asp Val Asn Asp
260      290                 295                 300
261 Asn Lys Pro Glu Ile Asn Ile Asn Leu Met Ser Pro Gly Lys Glu Glu
262 305                 310                 315                 320
263 Ile Ser Tyr Ile Phe Glu Gly Asp Pro Ile Asp Thr Phe Val Ala Leu
```

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PATENT APPLICATION:  US/09/759,130B      TIME: 16:34:02

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\09262002\I759130B.raw
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:81; N Pos. 3515,3574
Seq#:91; N Pos. 3462,3521
Seq#:96; N Pos. 3429,3488
Seq#:101; N Pos. 3376,3435
Seq#:106; N Pos. 3369,3428
Seq#:111; N Pos. 3316,3375
Seq#:324; N Pos. 14
Seq#:343; N Pos. 3043,3048
Seq#:450; Xaa Pos. 1,2,3,4,5,7,10,11
Seq#:451; Xaa Pos. 1,2,3,4,6,7,8,9,10,11,12,13,14,15,16
Seq#:452; Xaa Pos. 1,2,3,6,7,9,10
Seq#:453; Xaa Pos. 4,5,7,8
Seq#:454; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,18,20,21,22,23,24,25
Seq#:454; Xaa Pos. 26,27,28,29,30,31,32,33,34,35,36,37,38
Seq#:455; Xaa Pos. 1,6
Seq#:456; Xaa Pos. 2,3,4,5,6,8,9,11,12,13,14,15,16,19,20,22,23,24,25,26,27
Seq#:456; Xaa Pos. 28,29,30,31,32,33,35,36,37
Seq#:457; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:457; Xaa Pos. 23,24,25
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VERIFICATION SUMMARY   DATE: 09/26/2002
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Input Set : A:\Sequence Listing.txt
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```
L:24 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:671 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (9) SEQUENCE:
L:679 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (10) SEQUENCE:
L:687 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (11) SEQUENCE:
L:695 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (12) SEQUENCE:
L:703 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (13) SEQUENCE:
L:711 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (14) SEQUENCE:
L:719 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (15) SEQUENCE:
L:727 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (16) SEQUENCE:
L:735 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (17) SEQUENCE:
L:743 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (18) SEQUENCE:
L:751 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (19) SEQUENCE:
L:759 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (20) SEQUENCE:
L:767 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (21) SEQUENCE:
L:775 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (22) SEQUENCE:
L:783 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (23) SEQUENCE:
L:791 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (24) SEQUENCE:
L:799 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (25) SEQUENCE:
L:807 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (26) SEQUENCE:
L:815 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (27) SEQUENCE:
L:823 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (28) SEQUENCE:
L:831 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (29) SEQUENCE:
L:839 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (30) SEQUENCE:
L:1154 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (34) SEQUENCE:
L:1310 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (36) SEQUENCE:
L:1318 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (37) SEQUENCE: .
L:1372 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (39) SEQUENCE:
L:1643 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (43) SEQUENCE:
L:1651 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (44) SEQUENCE:
L:1659 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (45) SEQUENCE: .
L:1667 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (46) SEQUENCE:
L:1675 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (47) SEQUENCE:
L:1683 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (48) SEQUENCE:
L:1691 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (49) SEQUENCE:
L:1699 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (50) SEQUENCE:
L:2036 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (62) SEQUENCE:
L:2044 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (63) SEQUENCE:
L:2052 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (64) SEQUENCE:
L:2060 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (65) SEQUENCE:
L:2068 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (66) SEQUENCE:
L:2076 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (67) SEQUENCE:
L:2084 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (68) SEQUENCE:
L:2092 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (69) SEQUENCE:
L:2100 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (70) SEQUENCE:
L:2536 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (79) SEQUENCE:
L:2544 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (80) SEQUENCE:
L:2615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:3480
L:2616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:3540
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/759,130B

DATE: 09/26/2002
TIME: 16:34:02

Input Set : **A:\Sequence Listing.txt**
Output Set: **N:\CRF4\09262002\I759130B.raw**

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L:2755 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (87) SEQUENCE:
L:2795 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (89) SEQUENCE:
L:2803 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (90) SEQUENCE:
L:2873 M:341 W: (46) "n" or "Xaa" used, for SEQ.ID#:91 after pos.:3420
L:2874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:3480
L:3040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:3420
L:3041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:3480
L:3202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:3360
L:3203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:3420
L:3359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:3360
L:3360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:3420
L:3515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:3300
L:3516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:3360
L:3606 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (116) SEQUENCE:
L:3614 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (117) SEQUENCE:
L:8304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:324 after pos.:0
L:9358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:343 after pos.:3000
L:13728 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13732 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13736 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13740 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13745 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13749 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13753 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13757 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:450
L:13758 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:450 after pos.:0
L:13770 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13775 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13779 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13784 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13788 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13792 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13796 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13800 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13804 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13808 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13812 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:451
L:13813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:451 after pos.:0
L:13825 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13829 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13833 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13837 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13841 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13845 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13850 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:452
L:13851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:452 after pos.:0
L:13863 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13867 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:453
L:13871 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:453
```

VERIFICATION SUMMARY   DATE: 09/26/2002
PATENT APPLICATION: US/09/759,130B   TIME: 16:34:02

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\09262002\I759130B.raw

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L:13875 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:453
L:13879 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:453
L:13883 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:453
L:13884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:453 after pos.:0
L:13896 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13901 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13906 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13910 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13915 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13919 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13923 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13927 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13932 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13936 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:454
L:13937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:454 after pos.:0
L:13939 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:454 after pos.:16
L:13941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:454 after pos.:32
L:13953 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13957 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:455
L:13961 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:455
L:13965 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:455
L:13966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:455 after pos.:0
L:13978 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:13983 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:13987 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:13992 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:13996 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:14001 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:14005 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:14010 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:14015 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:456
L:14016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:456 after pos.:0
L:14018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:456 after pos.:16
L:14020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:456 after pos.:32
L:14032 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:14037 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:457
L:14041 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:457
L:14074 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:457 after pos.:0
L:14076 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:457 after pos.:16
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